PARTNERSHIPS TO PROTECT

he U.S. Environmental Protection Agency took an unexpected and unprecedented step in 1989 by inviting their traditional adversaries in businesses and industries to participate in a voluntary effort to reduce emissions of 17 hazardous substances by 33% in four years and by 50% in six years. In the period since, federal regulatory agencies have created many more opportunities for this formation and protection.

nities for chief executives and managers
of industrial departments of
health, safety, and environment participate in vol-

rization. According to Wegman, the regulations are much better for having involved the stakeholders from the beginning of the process of drafting the regulations rather than asking for their input after the EPA had completed a detailed set of proposed regulations. She believes that the EPA demonstrated willingness to make revisions and adjustments in response to the suggestions from affected businesses helped to build trust. But, noted Wegman, "reaching true consensus is time-consuming and it is really tough to bring closure to the complex technical issues involved in . . . this set of regulations."

fines or other penalties for violations. Business and industry managers frequently opposed federal environment, health, and safety regulations as poorly conceived, too rigorous, and too costly to achieve. Such managers lobbied Congress for relief and challenged the EPA and OSHA in the courts. For almost two decades, the relationship between the federal regulatory agencies and business

untary programs and in framing new regulations and standards. Recent reports of successful negotiations on environmental and worker safety protection regulations, indicate that business and industry may have reached détente with federal agencies on these issues. But a closer look reveals the difficulties that remain in bringing regulators and businesses together to work on contentious issues.

For example, Nancy Wegman, deputy director of the Office of Air Quality Standards and Safety for the EPA, says her office sought recommendations from all the parties potentially affected by new operating permit regulations issued under the Clean Air Act reautho-

Policing Polluters Creates Adversaries

Congress established the EPA and the Occupational Safety and Health Administration (OSHA) in 1970. These agencies were mandated to protect the environment from industrial and other sources of pollution and to protect American workers from onthe-job hazards. The mandate included broad powers to strictly regulate industry practices, to carry out inspections to determine whether the regulations were being met, and to levy

grew increasingly bitter. Environmental policy became a defining issue in local, state, and national political campaigns, and separated conservatives from liberals and small and large businessmen and farmers from environmentalists.

industry

The Comprehensive Environmental Response, Compensation, and Liability Act, commonly known as "Superfund," was passed in 1980. Written in response to national publicity over the health impacts of an abandoned hazardous waste dump in the Love Canal neighborhood in Niagara Falls, New York, the Superfund law quickly became the focus of a contentious environmental and economic debate.

The Superfund law's concept was simple:

it created a trust fund from a tax on raw materials used in chemical manufacturing that would pay for the costs to the EPA of cleaning up abandoned hazardous waste sites and for responses to environmental catastrophes. While the EPA was to supervise technical contractors in carrying out the clean-ups, the Department of Justice was to identify businesses, individuals, and municipalities responsible for dumping the hazardous waste, to recover costs of the clean-up, and to compensate victims. As the EPA set about implementing Superfund, every decision made by the agency was challenged by the parties involved. Controversy and debate surrounded questions such as which sites posed the greatest risk, how the risk should be quantified, what cleanup levels should be attained, what technology is best and cheapest to clean up the site, what should be done with the hazardous wastes removed from the site, and, foremost, who should pay for what percentage of the cleanup costs and compensation. Two thousand sites were identified for clean-up and estimated costs of the program escalated into the bil-

lions of dollars. By 1984, when the Superfund program was to have been completed, only a handful of sites had been cleaned up, none of the differences over fundamental program policies were resolved, the relationship between the EPA and industry had reached an all-time low, and both parties had been publicly disgraced. In 1986, with no consensus on how to "fix" Superfund, Congress simply extended the law for an additional 4 years, expanded the size of the trust fund, and authorized research to address technical questions. Ironically, however, they attached an unrelated requirement to the Superfund bill that eventually brought regulators and businessmen together in meetingrooms, rather than courtrooms, to begin an open process of collaboration in the formulation and implementation of environmental regulations.

The Community Right-to-Know Act requires major industries to report to the EPA the amount of emissions of about 300 hazardous substances by factories and plants. These reports are aggregated and disseminated to neighboring communities. The complete list of emissions, called the Toxic Release Inventory (TRI), provides the EPA with baseline data to determine trends and to monitor the impact of environmental laws and regulations on reducing industrial pollutants.

The first TRI was released by the EPA in 1988 and included reports of emission releases for 1987. The numbers grabbed the attention of both local and national news media. The Report showed that millions of pounds of the 300 chemicals were routinely being released into air, water, and soil in every state

and major community in the United States. Corporate chief executives met with their legal advisors, directors of communications, and directors of environment, safety, and health, to develop strategies to respond to the public concern generated by the information in the TRI. It was apparent that since the TRI was compiled from data provided by the industry itself, there was little that could be done to attenuate the initial negative impact from its publication. Industry could point to the economic benefits accruing to communities with strong industrial bases and suggest that the health and environmental effects of many of the substances released were minimal. But these arguments did little to blunt public perception that industrial pollution of the environment outside the factory fence was considerably greater and more dangerous than previously realized and that information had been withheld by corporate officials. Without demonstrable and substantial progress in pollution prevention, it was clear to business leaders that public concern would compel Congress to strengthen environmental protection laws, giving the EPA and other government agencies an even greater regulatory role.

Chief executives needed a longer-term strategy to prepare for future editions of the TRI. They turned to their directors of environment, safety and health to set up and expedite projects in recycling, energy recovery, and the treatment and disposal of hazardous substances. Because these were longrange efforts with significant budgetary impacts, they had to be weighed against the estimated costs of potential increases in regulation and negative public image due to the TRI. Directors of environment, safety and

strate an aggressive and effective volunteer effort to reduce emissions. After considering the impact a voluntary pollution prevention and public information strategy would have versus the traditional confrontational response by the industry, the EPA developed the "33/50" volunteer program.

Collaboration Creates Opportunities

The 33/50 program was conceived by EPA administrator, William Reilly. Reilly set a target for industry to voluntarily reduce releases of 17 of the most dangerous substances on the TRI by 33% in 4 years and by 50% within 6 years using industrydesigned engineering controls and manufacturing practices. The offer by the EPA to give industry a chance to participate in a highly visible, voluntary program of pollution prevention was accepted by 1,200 American businesses which met and exceeded Reilly's goals for emission reductions. It signaled a fundamental change in the historical relationship between government regulators and business leaders. Clearly, complete agreement on a partnership between government and industry to protect environmental and occupational health has by no means been achieved, but the movement toward negotiated regulations and the flexibility on the part of regulatory agencies has been marked.

The first major test of partnering occurred in implementing the tough new requirements of the reauthorization of the Clean Air Act, and continues to be a problem today. William Rosenberg, Reilly's assistant administrator for air programs established a Clean Air Act Advisory Committee of business, labor, legal, and academic lead-

THE OFFER BY THE EPA TO GIVE INDUSTRY A CHANCE TO PARTICIPATE IN A HIGHLY VISIBLE, VOLUNTARY PROGRAM OF POLLUTION PREVENTION WAS ACCEPTED BY 1,200 AMERICAN BUSINESSES. IT SIGNALED A FUNDAMENTAL CHANGE IN THE HISTORICAL RELATIONSHIP BETWEEN GOVERNMENT REGULATORS AND BUSINESS LEADERS.

health participated in estimating costs and, as a result, became more deeply involved in making corporate policies.

Industry directors of environment, safety, and health were also assigned to work with EPA officials to assure that the chemicals subject to being reported in the TRI included only those of environmental and public health concern, and to ask that the EPA help educate the public on the relative risks posed by the various kinds and amounts of compounds being reported. Another important component of the strategy was to demon-

ers to provided advice to the EPA on implementing the reauthorized program of air pollution control. With the committee's advice and support, the EPA began an open process of negotiation and consultation in creating new regulations and standards affecting industry.

Today, the EPA manages several programs to foster the cooperation of all the stakeholders in environmental legislation, including the Environmental Leadership Program, designed to find creative new approaches to setting environmental regula-

tions; the Green Lights Program to reduce waste; the Reduced Risk Program to expedite EPA review of new pesticides designed to be less hazardous to the environment; the Common Sense Initiative to maximize benefits and minimize costs of regulations; and the Community-based Environmental Protection Project to involve citizens in grassroots efforts to set priorities for local environmental protection goals.

Perhaps the most ambitious new EPA program is Project XL, established as a part of the regulatory reforms put in place by the Clinton administration. This project allows businesses and industries that fall under federal regulations to work with concerned citizens and regulatory agency staff to create alternative systems to meet and exceed the pollution prevention targets set under the technical approaches established in EPA regulations.

Federal agencies other than the EPA that deal with environmental and occupational health matters have also set up voluntary, cooperative programs with industry. The National Toxicology Program (NTP) is the largest federal program of long-term toxicological studies of environmental chemicals, drugs, and other agents. The NTP compiles the Biennial Report on Carcinogens for the U.S. Department of Health and Human Services. The NTP Partnerships project invites industry scientists to collaborate in designing research studies, in developing and validating new methods in chemical toxicology that improve extrapolation of results of animal experiments to humans, and to participate in the scientific peer review process at critical points in studies done by the NTP. The concept of joint NTP-industry scientific collaboration was opposed by representatives of organized labor and environmental advocacy groups when it was first proposed at a public meeting in March 1993. The representatives of these organizations voiced deep concerns that inviting industry scientists into limited research collaborations with NTP scientists might result in studies that do not find all the possible hazards that might result from human exposures or that reports of the studies would minimize the potential public health implications of NTP findings. The NTP moved cautiously ahead and in a meeting in July 1996, criticism and concern had been replaced by support for the NTP's efforts. Participants agreed that their worries had been valid but that the NTP had worked openly to assure that no bias found its way into its research studies. George Lucier, director of the Environmental Toxicology Program at the NIEHS, is steering efforts to open up scientific research and peer review. Lucier says, "While conflict-ofinterest issues involving the relationship between the NTP and industry have not been entirely resolved, there is confidence that these concerns can be addressed. This is a slow process, and the partnerships must be open, and all parties need to feel that they are involved."

On the Horizon

Both the federal government and industry are being downsized to reduce costs. The need to respond to information in the TRI highlighted the importance of the roles of directors of environment, safety and health in large industrial organizations in finding methods to prevent pollution. It also gave them a stronger voice in making corporate policy. But these departments are subject to the same budget and staffing cuts associated with company efforts to "reengineer" cost savings into their operations. In addition, a survey of environment, safety and health managers in 185 U.S. corporations conducted by Arthur D. Little, Inc. and released in December 1995, found that these experts are not entirely optimistic about their status and potential contribution within industry. In addition to the problem of directing insufficient resources for environment and safety, the survey found that senior corporate managers still consider it the mission of environment safety and health programs to "keep the company out of trouble." Over 70% of directors reported lack of recognition and acceptance of such programs as a contributor to the company bottom line and described the them as a separate "culture" within the company. This report suggests that corporate executives fail to recognize the potential financial benefits that accrue from compliance with environmental regu-

Ladd Greeno of Arthur D. Little, Inc., reports that companies that designed programs to improve environmental, health, and safety performance find that the programs have boosted profits and productivity and pleased stockholders. "Some organizations recognize that certain [environment, safety and health] issues can affect the way they or their entire industries do business, and are managing their environmental function as a critical part of their business practice," says Greeno.

In the federal sector, the reinvention of government to cut costs and balance the budget has had an effect on the government's ability to pursue partnerships with industry and community groups in setting environmental regulations. Reduced staffing in most federal regulatory agencies means that there are fewer employees, available to work on both the routine regulatory programs and assume leadership in new efforts

to develop consensus and partnerships.

In addition, developing trust and productive collaborations on environmental and health issues requires long meetings on complex technical subjects with large numbers of stakeholders who hold diverse positions and most of whom live and work outside of Washington, D.C. where the regulatory process is centered. This is difficult to accomplish in the face of limited funds for travel, collection and analysis of data, research and technical support, and trained personnel. Wegman faced this problem in her efforts to expand partnerships and outreach in setting regulations under the Clean Air Act. She notes that partnership meetings have become routine at the highest levels of government, industry, and labor. These are important in providing necessary leadership, visibility, and credibility. However, these meetings consume staff time and scarce funds and potentially compete with smaller, more focused partnerships that are critically needed to form collaborations for the achievements of direct and measurable improvements in regulations. Wegman's preference is to give greater priority to smaller, regional and local partnership meetings of technical experts and interested citizens that focus on specific problems and contribute valuable information on how best to protect the environment and public health and the economic vitality of businesses and industries and the community. Both Wegman and Lucier agree that strong, longterm support and commitment from the most senior government and industry officials is necessary if true changes are to be

made in institutional behaviors. The next several years will be critical in determining whether the move toward partnerships and consensus will continue and whether the acrimonious relationship among supporters of industrial expansion and of environmental protection and human health will fade into history. Will corporate CEO's embrace the idea that protection of the environment builds profits? Will changes in the worldwide economy, demographics and international business manufacturing shift the debate outside the United States to developing nations and markets? One can only conjecture. But history suggests that all stakeholders who believe in partnership rather than confrontation should plan to redouble their efforts.

Dan VanderMeer